

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing
(day/month/year)

13 OCT 2000

Applicant's or agent's file reference NONE		IMPORTANT NOTIFICATION	
International application No. PCT/US98/20376	International filing date (day/month/year) 29 SEPTEMBER 1998	Priority Date (day/month/year) NONE	
Applicant GEOFFREY L. MCCABE			

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer ROBERT NAPPI Telephone No. (703) 308-7615 <i>Renee Preston</i>
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference NONE	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US98/20376	International filing date (day/month/year) 29 SEPTEMBER 1998	Priority date (day/month/year) NONE
International Patent Classification (IPC) or national classification and IPC IPC(7): G10D 3/14 and US Cl.: 84/312R		
Applicant GEOFFREY L. MCCABE		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 27 APRIL 2000	Date of completion of this report 11 SEPTEMBER 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer ROBERT NAPPI Telephone No. (703) 308-7615 <i>Renee Preston</i>

I. Basis of the report**1. With regard to the elements of the international application:*** the international application as originally filed the description:pages 1-20, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____ the claims:pages 21-31, as originally filedpages NONE, as amended (together with any statement) under Article 19pages NONE, filed with the demandpages NONE, filed with the letter of _____ the drawings:pages 1-5, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____ the sequence listing part of thedescription: NONE, as originally filedpages NONE, filed with the demandpages NONE, filed with the letter of _____**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language _____ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international** contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4. The amendments have resulted in the cancellation of:** the description, pages NONE the claims, Nos. NONE the drawings, sheets/fig NONE**5. This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).****

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

**Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/20376

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. statement**

Novelty (N)	Claims	1-39	YES
	Claims	NONE	NO
Inventive Step (IS)	Claims	1-39	YES
	Claims	NONE	NO
Industrial Applicability (IA)	Claims	1-39	YES
	Claims	NONE	NO

2. citations and explanations (Rule 70.7)

Claims 1-39 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a stringed instrument with specific connections regarding the strings and the fulcrum.

----- NEW CITATIONS -----

NONE

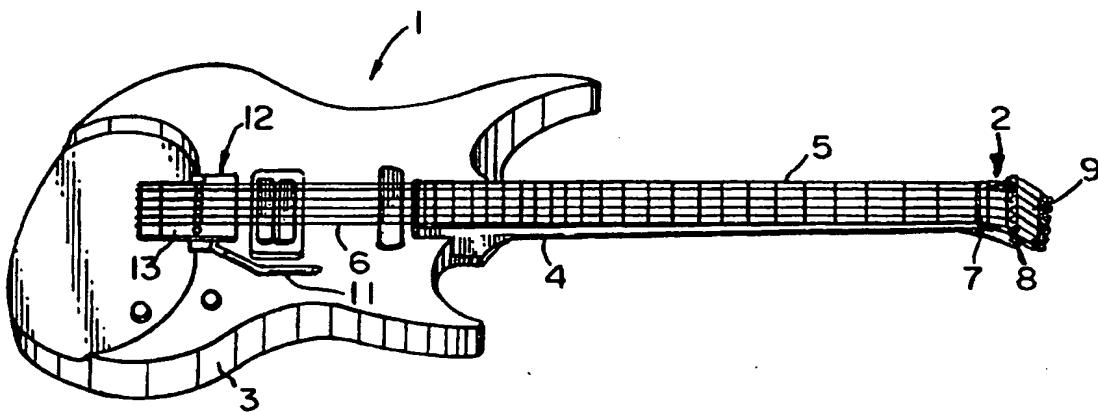


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ :	A1	(11) International Publication Number:	WO 00/19405
G10D 3/14		(43) International Publication Date:	6 April 2000 (06.04.00)
(21) International Application Number:	PCT/US98/20376	(81) Designated States:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date:	29 September 1998 (29.09.98)	(71)(72) Applicant and Inventor:	MCCABE, Geoffrey, L. [US/US]; 36 East 7th Street #5, New York, NY 10003 (US).
(74) Agents:	ELAND, Stephen, H. et al.; Dann, Dorfman, Herrell & Skillman, P.C., Suite 720, 1601 Market Street, Philadelphia, PA 19103 (US).	(73) Priority Data:	

Published*With international search report.*

(54) Title: TUNING APPARATUS FOR STRINGED INSTRUMENT



(57) Abstract

An apparatus is provided for tuning a stringed instrument. The apparatus includes a fulcrum tremolo (12) that is pivotable about a fulcrum axis to provide vibrato effect on the strings of the instrument. Six intonation modules (13) are mounted on the fulcrum tremolo. The intonation modules include macrotuners for raising and adjusting the tension of the strings to pitch from an untensioned condition. The apparatus further includes a global tuner (50) for simultaneously tuning all of the strings on the instrument. A one-piece folded metal base plate (220) and integral spring blade (240) operable with the fulcrum tremolo is also provided, along with a method for producing the integral base plate and spring blade. Alternatively, six bridge elements (170) provide second anchoring points so that the strings are substantially inextensible rearward of the second critical points. Macrotuner (52) are adapted to semi-headless tuners (51).

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EE	Estonia						

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/20376

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :G10D 3/14

US CL :84/312R

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 84/312R,307,313

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO APS

search terms: tremolo, bridge, tuning

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,717,150 A (ROSE) 10 February 1998, (10.02.98) all	1-39
A	US 5,705,760 A (ROSE) 06 January 1998, (06.01.96) all	1-39

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means		
P document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
20 DECEMBER 1998

Date of mailing of the international search report
12 JAN 1999

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The PTO did receive the following
list of item(s)

A 10 POST CARD